



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/531,490	04/15/2005	Christophe Fichot	NITROF P61AUS	8718
20210 7590 06/08/2007 DAVIS & BUJOLD, P.L.L.C. 112 PLEASANT STREET CONCORD, NH 03301			EXAMINER PARSLEY, DAVID J	
			ART UNIT 3643	PAPER NUMBER
			MAIL DATE 06/08/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	Application No. 10/531,490	Applicant(s) FICHOT ET AL.	
	Examiner David J. Parsley	Art Unit 3643	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 29 March 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 14-33 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 14-33 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 April 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **Detailed Action**

### ***Amendment***

1. This office action is in response to applicant's amendment dated 3-29-07 and this action is final.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 14-17, 27-28 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,133,261 to Kelsey in view of U.S. Patent No. 3,200,751 to Vitt.

Referring to claims 14 and 27, Kelsey discloses an ammunition projectile for a firearm, having diminished penetration into a soft medium, the projectile comprising a nose – at 14,15,17,20,21,22, and a cap – at 12,16, the nose is essentially conical in shape and has a flat leading central portion – at 15,19,24 – see figures 1-2a, and comprises at least two indentations – at 17, disposed essentially symmetrically in relation to one of an axis of the projectile and a respective longitudinal axial plane of the projectile and a longitudinal plane bisecting the projectile along a central longitudinal axis – at 29, – see figures 1-2a, each indentation having a

Art Unit: 3643

curved profile from a first edge to a second edge symmetrical with respect to one of the respective longitudinal axis of the projectile and the respective longitudinal axial plane – see at 17,20,24,25,26 in figures 1-2a, and tapering toward the nose – see figure 1, so that the projectile during trajectory of the projectile through air, is sufficiently slowed so as to diminish penetration of the projectile into a soft medium without significantly altering a trajectory precision of the projectile – see figures 1-2 and column 2 lines 45-63. Kelsey does not disclose each respective indentation being disposed essentially symmetrically in relation to a respective longitudinal axial plane coincident with a longitudinal axis of the projectile and bisecting the respective indentation. Vitt does disclose each respective indentation – between items 22, being disposed essentially symmetrically in relation to a respective longitudinal axial plane coincident with a longitudinal axis of the projectile and bisecting the respective indentation – see figures 3-7. Therefore it would have been obvious to one of ordinary skill in the art to take the device of Kelsey and add the indentations of Vitt, so as to allow for the device to be made aerodynamic for stable flight.

Referring to claim 15, Kelsey discloses a base of the indentations is rounded – see at 17,20,24,25,26 in figures 1-2a.

Referring to claim 16, Kelsey discloses the hollow areas are formed of two curvilinear planes whose intersection is defined by a radial ridge – see at 15,24 in figures 1-2a.

Referring to claims 17 and 28, Kelsey discloses the nose comprises a flat central portion – see at 15,19,24 in figures 1-2a.

Referring to claim 33, Kelsey discloses an ammunition projectile for a firearm, having diminished penetration into a soft medium, the projectile comprising a nose – at

Art Unit: 3643

14,15,17,20,21,22, and a cap – at 12,16, the nose is essentially conical in shape and has a flat leading central portion – at the centermost portion of 15 – see figures 1-2a, and comprises at least two indentations – at 17, disposed essentially symmetrically in relation to one of an axis of the projectile and a respective longitudinal axial plane of the projectile and a longitudinal plane bisecting the projectile along a central longitudinal axis – at 29, – see figures 1-2a, each indentation having a curved profile from a first edge to a second edge symmetrical with respect to one of the respective longitudinal axis of the projectile and the respective longitudinal axial plane – see at 17,20,24,25,26 in figures 1-2a, and tapering toward the nose – see figure 1, with a leading edge of each indentation being spaced from the flat leading central portion – see figures 1-2, where the leading portions of the indentations are spaced from the centermost portion of 15, so that the projectile during trajectory of the projectile through air, is sufficiently slowed so as to diminish penetration of the projectile into a soft medium without significantly altering a trajectory precision of the projectile – see figures 1-2 and column 2 lines 45-63. Kelsey does not disclose each respective indentation being disposed essentially symmetrically in relation to a respective longitudinal axial plane coincident with a longitudinal axis of the projectile and bisecting the respective indentation. Vitt does disclose each respective indentation – between items 22, being disposed essentially symmetrically in relation to a respective longitudinal axial plane coincident with a longitudinal axis of the projectile and bisecting the respective indentation – see figures 3-7. Therefore it would have been obvious to one of ordinary skill in the art to take the device of Kelsey and add the indentations of Vitt, so as to allow for the device to be made aerodynamic for stable flight.

Claims 18 and 29 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kelsey as modified by Vitt as applied to claims 17 or 28 above. Kelsey as modified by Vitt further discloses a diameter of the flat central portion is smaller than the diameter of the projectile at a base of the nose – see figures 1-2a of Kelsey. Kelsey as modified by Vitt does not disclose a diameter of the flat central portion generally ranges from 10 to 50% of a diameter of the projectile at a base of the nose and preferably from one fourth to one third of the diameter of the projectile. However, applicant does not disclose that the diameter of the flat central portion is from 10 to 50% of the diameter of the projectile at a base of the nose is critical to the operation of the invention. Therefore, it is deemed that the device of Kelsey as modified by Vitt is capable of operating with the diameter of the flat central portion being from 10 to 50% of the diameter of the projectile at a base of the nose and it would have been obvious to one of ordinary skill in the art to take the device of Kelsey as modified by Vitt and add the diameter of the flat central portion being from 10 to 50% of the diameter of the projectile at a base of the nose, so as to allow for the device to be made more aerodynamic to improve the flight characteristics of the device.

Claims 19-20 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kelsey as modified by Vitt as applied to claim 14 above, and further in view of U.S. Patent No. 4,450,769 to Moser.

Referring to claim 19, Kelsey as modified by Vitt does not disclose the nose and the cap comprise a cavity. Moser does disclose the nose and the cap comprise a cavity – see at 17-19 in the drawing figure. Therefore it would have been obvious to one of ordinary skill in the art to

Art Unit: 3643

take the device of Kelsey as modified by Vitt and add the cavity in the nose and cap of Moser, so as to allow for the center of gravity of the device to be modified.

Referring to claim 20, Kelsey as modified by Vitt and Moser further discloses the cavity is designed to receive a blocking means – at 19 and/or 20 – see the drawing figure of Moser. Therefore it would have been obvious to one of ordinary skill in the art to take the device of Kelsey as modified by Vitt and Moser and add the blocking member of Moser, so as to allow for the center of gravity of the device to be modified.

Referring to claim 25, Kelsey as modified by Vitt and Moser further discloses the cavity comprises a central zone – see the interior at 17-19 in the drawing figure of Moser, that is at least partially threaded – see at 17, and the blocking means is a bolt – at 19 or 20, partially engaged in the central zone – see the drawing figure of Moser. Therefore it would have been obvious to one of ordinary skill in the art to take the device of Kelsey as modified by Vitt and Moser and add the blocking means of Moser, so as to allow for the center of gravity of the device to be modified.

Claims 21-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kelsey as modified by Vitt as applied to claim 14 above, and further in view of U.S. Patent No. 5,259,320 to Brooks.

Referring to claims 21-22, Kelsey as modified by Vitt does not disclose the projectile is made of a soft metal being copper. Brooks does disclose the projectile is made of copper – see column 6 lines 1-17. Therefore it would have been obvious to one of ordinary skill in the art to take the device of Kelsey as modified by Vitt and add the projectile made of copper of Brooks, so as to allow for the device to be easily manufactured and machined.

Claims 23-24 rejected under 35 U.S.C. 103(a) as being unpatentable over Kelsey as modified by Vitt and Moser as applied to claim 20 above. Kelsey as modified by Vitt and Moser does not disclose the blocking means is made of a hard metal being steel. However, applicant does not disclose that the blocking means being made of steel is critical to the operation of the invention and it is deemed that the device of Kelsey as modified Vitt and Moser is capable of operating with the blocking means made of steel. Therefore it would have been obvious to one of ordinary skill in the art to take the device Kelsey as modified by Vitt and Moser and add the blocking means being made of steel, so as to allow for the device to be made more durable.

Claim 26 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kelsey as modified by Vitt as applied to claim 14 above, and further in view of U.S. Patent No. 5,385,100 to Corzine et al. Kelsey as modified by Vitt does not disclose the projectile is made of brass. Corzine et al. does disclose the projectile is made of brass – see column 5 lines 41-50. Therefore it would have been obvious to one of ordinary skill in the art to take the device of Kelsey as modified by Vitt and add the projectile made of brass of Corzine et al., so as to allow for the device to be easily manufactured and made more durable.

Claims 30-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kelsey as modified by Vitt as applied to claim 27 above, and further in view of U.S. Patent No. 4,450,769 to Moser.

Referring to claim 30, Kelsey as modified by Vitt does not disclose the nose and the cap comprise a cavity. Moser does disclose the nose and the cap comprise a cavity – see at 17-19 in the drawing figure. Therefore it would have been obvious to one of ordinary skill in the art to



Art Unit: 3643

take the device of Kelsey as modified by Vitt and add the cavity in the nose and cap of Moser, so as to allow for the center of gravity of the device to be modified.

Referring to claim 31, Kelsey as modified by Vitt and Moser further discloses the cavity is designed to receive a blocking means/member – at 19 and/or 20 – see the drawing figure of Moser. Therefore it would have been obvious to one of ordinary skill in the art to take the device of Kelsey as modified by Vitt and Moser and add the blocking member of Moser, so as to allow for the center of gravity of the device to be modified.

Claim 32 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kelsey as modified by Vitt as applied to claim 27 above, and further in view of U.S. Patent No. 5,259,320 to Brooks.

Referring to claim 32, Kelsey as modified by Vitt does not disclose the projectile is made of a soft metal being copper. Brooks does disclose the projectile is made of copper – see column 6 lines 1-17. Therefore it would have been obvious to one of ordinary skill in the art to take the device of Kelsey as modified by Vitt and add the projectile made of copper of Brooks, so as to allow for the device to be easily manufactured and machined.

### ***Response to Arguments***

3. Applicant's arguments with respect to claims 14-33 have been considered but are moot in view of the new ground(s) of rejection.


*Conclusion*

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to David J. Parsley whose telephone number is (571) 272-6890.

The examiner can normally be reached on Monday-Friday from 8am to 4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Poon can be reached on (571) 272-6891. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



David Parsley  
Primary Examiner  
Art Unit 3643